

Amendments to the Drawings:

[Three] sheets of formal drawing are attached to replace the three sheets of informal drawings as originally filed.

REMARKS/ARGUMENTS

1. The drawings are objected to. New sheets of formal drawing are appended.

2. Claims 1 and 4 are rejected under 35 U.S.C. §102(e) as anticipated by Schoepf et al. 6,833,713. This basis for rejection is traversed, because Schoepf et al. do not show or describe each and every element of the rejected claims.

The Schoepf et al. reference is intended to determine the presence of serial or parallel faults in what is essentially a direct-voltage source driving a load through a pair of wires. That is, the faults being sensed are serial (in series with the load) or parallel (in parallel with the load). By contrast, the purpose of the claimed invention is for determining the existence of a fault between a power-supply/load combination essentially corresponding to that of Schoepf et al. and a reference conductor intended to be electrically isolated from the power-supply/load combination. These are completely different purposes, and result in different methods for making the determinations.

Examiner's discussion regarding claim 1, at page 3 of the Office Action, ignores or makes no mention whatever of salient portions of claim 1. In particular, Examiner does not mention the recitation of claim 1

"coupling to a node, by a resistive coupling path having an equivalent resistance, a fixed proportion of the direct voltage of said direct-voltage power supply, said node being connected by a measuring path to said reference conductor;"

which is not found in Schoepf et al., because there is no

"reference conductor" which is intended, under normal operating conditions, to be isolated from the power-supply/load combination. Claim 1 is patentable over Schoepf et al. in a §102 sense for this reason taken alone.

In addition, a step of claim 1 "at a time between said first and second times, coupling a second terminal of said direct-voltage power supply to a second terminal of said load, for energization thereof;" is not found in Schoepf et al. In fact, it appears that in the method of Schoepf et al. for determining the presence or absence of a fault, the load (item 24) is always connected to the source. When a fault is detected, the switch 26 may be opened, but this is unrelated to the sensing function. The operation of the Schoepf et al. switch 24 would constitute a decoupling, rather than the recited "coupling." Claim 1 is patentable in a §102 sense for this reason taken alone.

In addition, claim 1 further recites the performance of the various steps at mutually different first and second times, and also makes clear that the coupling step takes place at a time between the first and second times. Insofar as can be determined, Schoepf et al. make no suggestion of performance of their steps in a particular order.

Claim 4 depends from patentable parent claim 1, and should be patentable therewith.

3. Claims 2, 3, and 5 are rejected under 35

U.S.C. §103(a) as unpatentable over Schoepf et al. in view of Vokey et al. 4,947,469. This basis for rejection is traversed, because claims 2, 3, and 5 ultimately depend from patentable claim 1, because there is no proper nexus for Examiner's suggested combination of Schoepf et al. with Vokey et al., and because, even if Schoepf et al. is combined with Vokey et al. notwithstanding the lack of a proper nexus for such combination, the claimed invention is still not made out.

Claims 2, 3, and 5 ultimately depend from patentable claim 1. Claims 2, 3, and 5 further restrict the invention recited in claim 1, and are narrower than claim 1. Claims 2, 3, and 5 are patentable for this reason taken alone.

In order to show a proper nexus for a suggested combination of references, one of the references must suggest going to the other, or in the absence of such a suggestion, Examiner must show a nexus by application of science and logic. Examiner states at page 4 of the Office Action "It would have been obvious . . . to include the resistance calculation as taught by Vokey et al. into Schoepf et al. for the purpose of providing more accurate measurements. In the present instance, the principal reference, which is Schoepf et al., makes no mention whatever of "measurements", more accurate or otherwise. Thus, there is no suggestion in Schoepf et al. which supports Examiner's position. Even if a person skilled in the art were to be motivated to seek "accurate measurements" pursuant to Examiner's suggestion, such is not to be found in Vokey et al., so the search would fail as to Vokey et al. Thus, there is no basis to be found in either Schoepf et al. or in Vokey et al. to support

Examiner's stated basis for his suggested combination of references. In the absence of some proper basis for Examiner's suggested combination of references, the suggested combination may not be made. In the absence of Examiner's suggested combination of Schoepf et al. with Vokey et al. the §103 rejection of claims 2, 3, and 5 fails. Claims 2, 3, and 5 are patentable in a §103 sense for this reason taken alone.

In addition, even if Examiner's suggested combination of Schoepf et al. with Vokey et al. is made, notwithstanding the lack of a proper nexus for such combination, the invention recited in claims 2 and 3 is not made out. Equations (1) and (2) are nowhere found in either Schoepf et al. or Vokey et al., and therefore cannot be found in their combination. Claims 2 and 3 are independently patentable in a §103 sense over Examiner's suggested combination of Schoepf et al. with Vokey et al.

4. Minor correction of claim 3 is made for compactness.

5. Reconsideration and allowance are requested of claims 1 through 5.

6. No fee is believed to be required for this amendment. Please charge any other fees to deposit account 50-2061.

FOR THE APPLICANT(S)

by William H. Meise

William H. Meise
Attorney for Applicant
Reg. No. 27,574

January 4, 2006
Duane Morris LLP
P.O. Box 5203
Princeton, NJ 08543-5203
609-631-2453